# SMARTPARK SYSTEM MODEL S2

## **User Instructions**

Dear Motorist,

Welcome to SMARTPARK, a leading, portable in-car electronic parking meter which is operated within the parked vehicle. In this User Manual, the parking meter is referred to as Smartpark or device.

### 1. General Description

The system consists of two components. A personal portable parking meter device, which is kept inside the car and a removable pre-paid-value parking card, which is kept in the driver's wallet. The card is used to set up the parking event.

The parking meter is a durable, battery operated device, which has been designed to function for many years. Both its high quality and special design enable its operation and storage in very difficult environmental conditions, when parking or driving the vehicle.

### 1.1 The Screen

A Liquid Crystal Display (LCD), on the upper front area of the parking meter, will display the necessary coded information for the parking control attendants when the device is activated. The information is displayed in four large alphanumeric digits. The display is also designed to guide and instruct the motorist to easily operate the parking device by displaying ten instructive enunciators. These are called "titles" and they are displayed in small letters around the perimeter of the large digit area of the screen.

### 1.2 The Key Board (see diagram in last page)

The parking meter is equipped with a mechanical keyboard, comprising six keys or buttons. The following illustrates their functional use:

- the POWER ON key (green colour and marked ON/OK) is located on the right, lower, front side, enabling both turning the device on and confirmation of parking set-up selection.
- the smaller OFF key (red colour and marked with a ring) is located at the left, lower, front side, is used to terminate the parking event. The OFF button must be held down for two seconds.
- the ZONE (AREA) (area) key is marked Z and is located on the right middle, front side. The Z button is used to return to the ZONE (AREA) mode to enable selection of the correct zone (area) for the next parking event.

- the Time or CLOCK key is marked with a clock and is located to the left middle, front side. The CLOCK key is used to adjust the real time clock, date and year of the device.
- the two SCROLL keys marked with arrows, on the left and right, upper front side are used to scroll the parking zones (areas) and to adjust the real time clock, date and year.

### 1.3 The Smart Card Interface

The smart card slot is located on the lower side of the parking meter. The smart card must be inserted to the end of the slot. This is done by inserting the card with its chip facing upwards. The smart card slot must be kept clean. Do not insert anything else into this slot

### 1.4 The Mounting Attachment

The mounting handle is located on the upper side of the parking meter. It is to be flipped into position to enable mounting the device on the rear view mirror or on any handles over the side windows of the vehicle. This will enable the parking meter to be easily seen by the parking attendant.

### 2. Batteries

### 2.1 Batteries Type and Life Span

The Smartpark meter is provided with two long life Lithium CR2450 batteries of three Volts each. Smartpark has a life span of over 800 working hours. When necessary, the batteries can easily be replaced by the motorist. The battery chamber is located on the rear, upper, back side of the parking meter, with easy access for battery replacement.

When the battery power reaches a low level, an early warning "BATT" indication will be displayed, flashing on the screen in four large letters when the parking meter is turned on. In addition, the small enunciator BATT will be displayed. The batteries should be replaced within a few days.

After the "BATT" indication is displayed, only eight additional parking events will be enabled before the Smartpark becomes inoperable.

### 2.2 Battery Replacement

To open the battery chamber, pull downwards on the plastic clip and remove the plastic lid covering the battery chamber. Gently pull one battery out of its housing unit. Next gently insert a new battery in the same position as the old one had been placed. Notice that the wider backside of the battery with the + on it must face upwards and the writing on the battery will be visible. Do the same for the second battery. Then return the battery lid to its normal position and push the clip upwards to fasten the battery chamber plastic lid.

Note: The batteries are replaced one by one to enable the real time clock and calendar to be powered during the batteries' replacement. Battery replacement should be undertaken quickly.

### 3. The Smart Card

### 3.1 How It Works

The smart card used by the Smartpark system is a very reliable high standard memory card. It was specially designed and programmed to meet the highest quality and security requirements. The smart card contains a pre-paid pre-programmed monetary value. When the parking meter is turned on and the card is inserted, the PPM week-day is displayed for a short time, then the PPM time is displayed for a short time, then the card balance is displayed for a short time on the screen. After each parking event, the parking fee charged is stored in the memory of the Smartpark. The parking charge due will be deducted from the smart card when the next parking event is activated. After the deduction, the card's new (current) balance is displayed on the screen.

### 3.2 Storing the Smart Card

The smart card should not be left in the Smartpark when parking the vehicle nor should it be left behind in the vehicle. The smart card is cash money which should be held by the motorist in his wallet.

The card should not be left on the dashboard exposed to the sun's radiation. The card contains a delicate electronic chip. The card must be kept dry, clean and care must be taken not to fold or break the card.

### 3.3 Smart Card Memory Feature

The Smartpark stores the last parking charge and the associated parking data of the last parking event in its memory. Upon initiating a new parking event, the Smartpark deducts the parking charge from the card's balance and writes the parking data into the card's memory. The data includes the zone (area), date, time and duration of the parking event. Thus, the card memory will store the details of many parking events.

### 3.4 Recorded Evidence

The parking data stored in the smart card memory, including the zone (area), date, time, duration and other important information regarding each parking event, may provide the motorist with the evidence needed to void a parking summons.

### 3.5 Security

The smart card is highly secure. Any attempt to manipulate, to forge, to use illegally, to copy, to recharge, to improperly use or to use in a non Smartpark application, will disable the smart card. The validity of a purchased smart card and its correct monetary value should be checked at the Point of

Sale, when purchased. Usually, a damaged smart card can be diagnosed with the proper equipment. Both non-used monetary value and the reason for the card damage may be ascertained. It is highly recommended to purchase the smart card only at authorised dealers. Unauthorised smart cards will not be accepted by Smartpark. Unauthorised cards may damage the Smartpark.

### 4. Parking Setup

- 4.1 Gently press the ON Button and follow the screen instructions. In normal situations the screen will display the title "ENTER CARD".
- 4.2 Fully insert the smart card into its slot. This is done by inserting the card with its chip facing upwards. The PPM weekday is displayed in large numerical digits, then the time is displayed under the title "TIME" then the remaining value of the card is displayed in large numerical digits under the title "BANK".

NOTE: The card must remain inserted in the Smartpark until the setup of the parking event has been completed.

The screen will display the last parking zone (area) selected as its default. The screen will display alphanumeric digits. For example, W07 indicates zone (area) seven of Wellington. The motorist may change the zone (area), using the two SCROLL keys, marked with arrows, to the zone (area) required.

- 4.3 Having pressed the OK button, the Smartpark will display in large letters "PULL CARD". The card is pulled and the Smartpark is activated. The card must be removed to activate the device. If the motorist wishes to change the zone (area), he must press the zone (area) key before removing the card. He then selects the correct zone (area), presses the OK key and removes the card.
- 4.4 The time or "CLOCK" key adjusts the real time clock, the date and year.

### 5. Time Features

Notice that there are three sub menus under the CLOCK key.

- Real time clock
- 2. Day and month (or viceversa)
- Year

By continuously pressing on the clock key, the screen will display each sub menu in turn. Upon releasing the CLOCK key, the displayed sub menu will be accessed. Select the parameters for that sub menu and press the OK key. If another sub menu is to be accessed, hold down the CLOCK key until the next desired sub menu is selected and proceed until confirmation by pressing the OK key.

### 5.1 Adjusting the Real Time Clock

- 5.1.1 Press the CLOCK key down and the real time is displayed in a four digit 24 hour format HH:MM. For example 09:31.
- 5.1.2 The cursor will then flash on the first digit which may be altered by the scroll keys. Each time the CLOCK key is pressed, the cursor moves one position from left to right.
- 5.1.3 After adjusting the Smartpark real time, press OK button to confirm. For example, to change the Smartpark time from 09:31 to 14:27, do as follows:
- 1. Press the CLOCK key until 09:31 appears.
- 2. Increase the left digit from 0 to 1 by pressing the right scroll kev.
- 3. Press the CLOCK key again.
- 4. Decrease the second digit from 9 to 4 by using the left scroll kev.
- 5. Press the CLOCK key again.
- 6. Decrease the third digit from 3 to 2 by using the left scroll key.
- 7. Press the CLOCK key again.
- 8. Increase the last digit from 1 to 7 by using the right scroll key.
- 9. Confirm by pressing the OK button.

### 5.2 Adjusting the Date

The date is displayed in a four digit format DD:MM, (MM:DD).

- 5.2.1 Hold the CLOCK key down for about 3 seconds until the real time is replaced by the date.
- 5.2.2 Adjust the first two digits to input the current day of the month. Use both digits, for example the 5th day of the month should be keyed in as 05.
- 5.2.3 Adjust the last two digits to input the current month. Use both digits, for example February should be keved in as 02.
- 5.2.4 Use the CLOCK key and the scroll keys to adjust each digit separately as described above.
- 5.2.5 Press the OK button to set.

### 5.3 Adjusting the Year

The year is displayed in a four digit format.

- 5.3.1 Hold the CLOCK key down for 6 seconds until the date is replaced by the year.
- 5.3.2 Key in only the last two digits, for example, 05.
- 5.3.3 Use the CLOCK key and the scroll keys to adjust each digit separately as described above.
- 5.3.4 Set by pressing the OK button.

### **Important Notes**

- a) The motorist is responsible for the correct time and date in the Smartpark. The time is usually adjusted twice annually, when moving the clock from summer to the winter time and later back again. The correctness of the time and date are checked by a remote control device used by the parking inspector. b) The parking tariffs may change during the day as defined in the city's parking zone (area) regulations. These variable tariffs are programmed into the Smartpark and the parking calculations are carried out automatically and correctly.
- c) If the time or date is incorrect, the motorist may overpay or underpay for parking time. For this reason, the motorist must take care to correctly calibrate his Smartpark device. The municipality will issue a summons if the device is not calibrated correctly.

### 6. Operation

- 6.1 Having set up a parking event, pull out the card to start the parking event. Keep the card in your wallet while parking. When Smartpark is activated, the screen will alternately display:
- a) the area (city) and zone (area) number (W07) and b) the time parked or alternatively remaining to park, depending on city (01:45)
- 6.2 Place the Smartpark in one of the following positions for parking attendant control:
- 6.2.1 Use the handle to hang it on the rear view mirror or on the handle located above the side windows.

### 7. Terminating the Parking Event

The device will terminate automatically when the legal parking time is over or as a default after 24 working hours. Parking is terminated earlier by pressing the OFF key for two seconds. In most applications, depending on the local parking regulations, the parking fees are calculated for the actual parking time. Thus, when turning off the device the motorist pays only for the actual time parked.

### 8. Options and Special Features

8.1 Smartpark will enable the completion of the current parking event regardless of how much value remains in the card. The motorist should use up his low value cards until they have no remaining value. Any unpaid debt left in the Smartpark memory will be deducted from the next inserted card, whether new or used. (Note that a new parking event cannot be initiated until the debt in the Smartpark is paid).

- 8.2 Smartpark flashes every 2-4 seconds to enable easy parking inspection in the darkness.
- 8.3 Some models of Smartpark will enable grace time after the legal time limit has expired. This extra or grace time indicates to the parking inspector that the legal parking time has terminated and that a summons may not yet be handed out. This is a feature which the municipality may wish to implement.

### 9. Troubleshooting

- 9.1 If problems are encountered, Smartpark must be reset as follows. The OFF key must be pressed, wait three seconds and then press the ON key.
- 9.2 If the meter does not turn off after pressing the OFF key for three seconds, then, without the card inserted in the device, press the ON key for ten seconds and release the key. The title "ENTER CARD" will be displayed on the screen. Then press the OFF key.
- 9.3 If the parking setup time exceeds ten seconds with the no key entry, the screen will display the titles "TIME" "ERROR" and the device will turn off automatically. To operate the device, the motorist must turn it ON again.
- 9.4 When inserting a smart card, if the titles "CARD" "ERROR" appear on the screen, then turn OFF the device, remove the card, turn ON again and reinsert the card. If the device still does not function, replace the smart card with another smart card.
- 9.5 If the meter does not turn ON, replace the batteries. If the device still does not function, return it to the service centre for repair.

# **SMARTPARK**

Quick Operational Instructions:

- 1. Press ON key and insert card.
- 2. Wait until "ENTER ZONE (AREA)" is displayed
- 3. Select a ZONE (AREA) by using the two "ARROW" keys.
- 4. Press OK key and pullout card to activate.
- 5. To terminate parking, hold down the red OFF key.

### Warning:

<u>Don't pull out the card before "PULL CARD" is</u> displayed on the screen!

# SCREEN - LCD BRIER LWWW ARROWLP ZONE CLOCK OFF SMART CARD SLOT

